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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR           | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|--------------------------------|---------------------|------------------|
| 09/988,402      | 11/19/2001  | Alexander Victorovitch Muratov | 5290-000003         | 8251             |

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| EXAMINER |
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ARANI, TAGHI T

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| ART UNIT | PAPER NUMBER |
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2131

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/988,402             | MURATOV ET AL.      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Taghi T. Arani         | 2131                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

1. Claims 1-33 have been examined and are pending.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-5, 9, 20-21 and 25 rejected under 35 U.S.C. 102(a) as being anticipated by JP Pub No. 2001-016655.

**As per claim 1**, JP Pub No. 2001-016655 discloses a method of protecting data within a portable electronic device (Abstract), the method comprising the step of:

erasing the data after a predetermined number of non-valid passwords are entered that fail to match a valid password (page 1 of 4, MEANS, where a detection means detects that the count of failure of a password exceeds constant value outputs a detecting signal, and a control means ...eliminates (i.e. erases) confidential information).

**As per claim 2**, JP Pub No. 2001-016655 discloses the method according to claim 1 further comprising the steps of:

requiring entry of a password to access the data within the portable electronic device;

determining whether the entered password is the valid password; and

allowing access to the data if the valid password is entered (paragraph 0024 discloses that the PDA is performing the activity with a password (i.e. requiring a password to access the data)

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and a control means detecting invalid password (i.e. detecting exhaustive search attack of password).

**As per claims 3-4**, JP Pub No. 2001-016655 discloses protecting the data within tie portable electronic device, where in the step of protecting further comprises encrypting selected data ( Abstract, paragraph 0025).

**As per claims 5 and 25**, JP Pub No. 2001-016655 discloses the method according to claim 4 further comprising decrypting only a portion of the encrypted selected data being accessed after entry of a valid password (see claim 4, where the personal digital assistant equipment obtains private key to decode the encoded confidential information (i.e. decrypting a portion of the encrypted selected data)).

**As per claim 9**, JP Pub No. 2001-016655 discloses the method according to claim 1 wherein the predetermined number is a user defined (Claim 1, where count of failure of a password exceeded constant value, i.e. user defined number of failed password is inherent).

**As per claim 20**, JP Pub No. 2001-016655 disclose the method according to claim 1 wherein the portable electronic device is a personal digital assistant.

**As per claim 21**, JP Pub No. 2001-016655 a method of protecting data within a portable electronic device to prevent access the data when in a locked mode, the method comprising the steps of:

encrypting selected data when in the locked mode (paragraph 004); and

erasing all data after a predetermined number of non-valid passwords are entered that fail to match a valid password (page 1 of 4, MEANS, where a detection means detects that the count

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of failure of a password exceeds constant value outputs a detecting signal, and a control means ...eliminates (i.e. erases) confidential information).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 6-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Pub No. 2001-016655 as applied to claim1 above, and further in view of US Patent 4, 634,807 to Chorley et al. (hereinafter "Chorley").

JP Pub No. 2001-016655 does not disclose but Chorley discloses a tamper-resistant software protection device (SPD) including a plurality of detectors detecting particular attack where SPD erase information by overwriting with random number (i.e. erasing comprises bit-wiping at least some of the data, wherein overwriting the data is performed plurality of times).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to employ Chorley's SPD in the PDA disclosed by JP Pub No. 2001-016655 to deter various layers of attacks including curious and determined intruder (Chorley, col. 6, lines 26-35).

4. **Claims 10-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Pub No. 2001-016655 as applied to claim1 above, and further in view of US Patent 6,501,380 to Jakobsson.

As per claims 10-11 JP Pub No. 2001-016655 does not disclose but Jakobsson disclose (col. 1, lines 31-49) erasing the data after predetermined time period from the last syncing of the

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portable electronic device with another electronic device, wherein the predetermined time period is user defined (Abstract, col. 2, lines 43-62, col. 3, line 57 through col. 4, line 12, lines 47-54, col. 6, lines 53-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the PDA disclosed in JP Pub No. 2001-016655 with the theft deterrence mechanism of Jakobsson for erasing the data after predetermined time period from the last syncing of the portable electronic device with another electronic device to lower the anticipated value of a stolen portable device without lowering the value to its rightful owner (Jakobsson, col. 1, lines 10-19)

As per claim 12, Jakobsson discloses the method according to claim 2 further comprising locking the portable electronic device and requiring entry of the valid password after a predetermined period of non-operation of a powered on portable electronic device (col. 29-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the PDA disclosed in JP Pub No. 2001-016655 with the theft deterrence mechanism of Jakobsson of locking the portable electronic device and requiring entry of the valid password after a predetermined period of non-operation of a powered on portable electronic device to provide a theft deterrence mechanism for the portable electronic device (Jakobsson, col. 1, lines 10-19).

**5. As per claims 13 and 24,** JP Pub No. 2001-016655 discloses the method according to claim 12 wherein the step of locking is performed only after an additional user defined time period after the period of non-operation (paragraph 0029 discloses that the encrypted confidential

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information is replaced with dummy confidential information when the count of failure of the time of detection of a tamper exceeds a constant value).

6. **Claims 14 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Pub No. 2001-016655 as applied to claim 2 above, and further in view of US Patent 5,574,786 to Dayan et al. (hereinafter Dayan).

As per claim 14, JP Pub No. 2001-016655 does not disclose but Dayan teaches locking the portable electronic device and requiring entry of the valid password after powering off the portable electronic device (col. 4, lines 39-50, Dayan discloses a personal computer system which includes the optional capability to detect movement of the system from its normally aligned operating position. Upon such detection of movement, the movement detecting apparatus preferably activates a tamper evident mechanism whereby the system can only be activated after a power-off by a system owner, authorized user, or normal user properly entering the POP and/or the PAP in response to a PROMPT for a password during a power-up routine).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of JP Pub No. 2001-016655 to incorporate the teaching of Dayan for requiring entry of the valid password after powering off the portable electronic device disclosed by JP Pub No. 2001-016655 to render the portable device inoperable to any unauthorized user who do not have the knowledge of the system passwords (Dayan, col. 4, lines 31-37).

7. **Claims 15 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Pub No. 2001-016655 as applied to claim 2 above, and further in view of US Patent 5,355,414 to Hale et al. (hereinafter Hale).

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As per claims 15 and 22, JP Pub No. 2001-016655 does not expressly disclose but hale discloses the method according to claim 2 further comprising disabling data transfer means of the portable electronic device until the valid password is entered (col. 2, lines 22-28).

It would have been obvious to one of ordinary skill in the art to modify the system of JP Pub No. 2001-016655 with the teachings of hale to disable data transfer means of the portable electronic device until the valid password is entered with the motivation to provide a safeguard against unauthorized access to the operating of the portable device (Hale, col. 1, lines 63-67).

**Claims 16-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Pub No. 2001-016655 as applied to claim 2 above, and further in view of US Patent 6,370,250 to Stein.

**8. As per claims 16 and 17**, JP Pub No. 2001-016655 does not disclose but Stein discloses protecting the valid password, wherein protecting the valid password is provided using an MD5 hash (col. 3, lines 52-67). It would have been obvious to one of ordinary skill in the art to employ the password protected method of Stein using MD5 to help strengthen the user authentication against attacks (Stein, col. 3 line 67 through col. 4, line 1).

**9. Claims 18-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Pub No. 2001-016655 as applied to claim 2 above, and further in view of JP Publication 08-251660

As per claim 18, JP Pub No. 2001-016655 does not disclose but JP Publication 08-251660 discloses the step of requiring entry of a password is performed to restrict access to selected applications within the portable electronic device (ABSTRACT).

It would have been obvious to one of ordinary skill in the art to modify the method of JP Pub No. 2001-016655 with the teaching of JP Publication 08-251660 with a motivation to



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prevent that a theft and the lost wireless personal digital assistant are used improperly and to be able to change the PDA into a lock condition (JP Publication 08-251660, paragraphs 007-008)

As per claim 19, 1 JP Publication 08-2516609 teaches the method according to claim 2 further comprising displaying a lockout screen having the appearance of a normal start-up screen of the portable electronic device and having a password entry portion (JP Publication 08-251660, paragraph 0022).

**10. Claims 25-32** are apparatus claims corresponding to the method claims 1, 3-4 and 15.

Claims 25-33 are rejected for the same reasons provided in the statement of rejections of claims 1, 3-4 and 15 above.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**11. Claim 33** is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,501,380 to Jakobsson.

Jakobsson discloses a method of protecting data within a portable electronic device, the method comprising the step of (col. 1, lines 31-49):

erasing the data after predetermined time period from the last syncing of the portable electronic device with another electronic device, wherein the predetermined time period is user defined (Abstract, col. 2, lines 43-62, col. 3, line 57 through col. 4, line 12, lines 47-54, col. 6, lines 53-53).

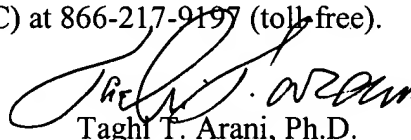
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**Conclusion**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taghi T. Arani whose telephone number is (571) 272-3787. The examiner can normally be reached on 8:00-5:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



Taghi T. Arani, Ph.D.

Examiner

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12/6/2005